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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,157	08/08/2001	Aaftab A. Munshi	TMC# BEL-025	3088
20350	7590	08/28/2006	EXAMINER	
			SIDDIQI, MOHAMMAD A	
			ART UNIT	PAPER NUMBER
				2154

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,157	MUNSHI ET AL.	
	Examiner	Art Unit	
	Mohammad A. Siddiqi	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 31 May 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213..

Disposition of Claims

4) Claim(s) 14-17 and 26-46 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 14-17 and 26-46 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. Claims 14-17 and 26-46 are presented for examination. Claims 1-13, 18-25 have been cancelled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 14-17, 26-33, and 35-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Luc Neumann (An Approach for an adaptive Visualization in a Mobile Environment, by Luc Neumann and Alberto Barbosa Raposo, Published by Springer-Verlag, London UK, 1997) (hereinafter Neumann)

4. As per claim 14, Neumann discloses a rendering method, comprising:

receiving at a rendering service a rendering request from a user site (fig 4, pages 7-8, section 3.3, Establishing of an Adaptive Rendering Facility in the WWW Environment), the user site being in communication with the rendering service over a network (fig 4, 5, 6, pages 7-9, section 3.3 and 4, Establishing of an Adaptive Rendering Facility in the WWW Environment), the rendering request comprising identifiers of rendering resources currently available at the user site required for a performing a rendering task, wherein the rendering task is performed at the rendering service (fig 4, 5, 6, pages 7-9, section 3.3 and 4, VRML files);

maintaining at the rendering service a resource pool comprising rendering resources from at least one previous rendering request from the user site (fig 4, 5, 6, pages 7-9, section 3.3 and 4, VRML files);

compare identifiers of the rendering resources in the resource pool at the rendering service with the identifiers of rendering resources currently available at the user site (fig 4, 5, 6, pages 7-9, section 3.3 and 4, strategy to visualize only a subset of a VRML files); and

storing generated rendering resources corresponding to previous rendering requests in the resource pool (Page 9, fig 5 and 6, strategy to visualize only a subset of a VRML files); and

determining whether to generate a given raw resource into a generated rendering resource based on a result of the comparing step (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files).

5. As per claim 15, Neumann discloses uploading a given required resource from the user site to the rendering service only if the comparing step determines there is not match the resource pool and the user site for that required resource (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files).

6. As per claim 16, Neumann discloses at the rendering service, generating the raw rendering resources (VRML files) to produce generated rendering resources (pages 5-7, Resource task manager controls the rendering process, VRML files describing interactive 3D objects); and providing the generated rendering resources to a rendering engine (fig 4, pages 5-8, Resource task manager controls the rendering process, VRML files describing interactive 3D objects).

7. As per claim 17, Neumann discloses the rendering resources comprising scene description files, further comprising manipulating a modeling application such that said scene description files comprise at least

one static scene description file and at least one dynamic scene description file (scene partitioning, pages 6-7)

8. As per claim 26, the claim is rejected for the same reasons as claim 1, above. In addition, Neumann discloses wherein if a required rendering resource is not already stored in a data store local to the rendering server computer system, then uploading that required rendering resource from the user site (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files);

wherein if a required rendering resource is already stored in the local data store, then obtaining that required rendering resource from the local data store (Page 9, fig 5 and 6, VRML files).

9. As per claim 27, the claim is rejected for the same reasons as claims 26 and 16, above.

10. As per claim 28, Neumann discloses performing the generation operation is performed only if the first required rendering resource is not already stored in the local data store (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files).

11. As per claim 29, Neumann discloses the processing includes producing a generated rendering resource from a first required rendering resource (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files), wherein if the first required rendering resource has been uploaded from the user site during servicing of a previous rendering request, then obtaining a previously generated rendering resource from the local data store thereby producing the generated rendering resource (Page 9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files), wherein if the first required rendering resource has not been uploaded from the user site during servicing of a previous rendering request, then performing the uploading to obtain the first required rendering resource, performing a generation operation on the first required resource to produce the generated rendering resource, and storing the generated rendering resource in the local data store (Pages 7-9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files).

12. As per claim 30, Neumann discloses updating a resource pool comprising information representative of rendering resources that have been uploaded from the user site when a required resource is uploaded from the user site (Pages 7-9, fig 3- 6, steps 1-5, strategy to visualize only a subset of a VRML files);

comparing information associated with the required rendering resource with the information in the resource pool (VRML files, fig 4) to determine whether or not a required rendering resource is already stored in the local data store (Pages 7-9, fig 3- 6, steps 1-5, strategy to visualize only a subset of a VRML files).

13. As per claim 31, Neumann discloses the rendering server computer system and the user site are at different geographical locations, and the method further comprises communicating with the user site over a communication network (fig 4, WWW Environment, page 7).

14. As per claim 32, Neumann discloses the communication network is the Internet (fig 4, WWW Environment, page 7).

15. As per claim 33, Neumann discloses the rendering server computer system and the user site are co-located, and the method further comprises communicating with the user site over a local area network (page 5, Thick up client anticipates local area network).

16. As per claim 35, Neumann discloses the rendering resources comprise scene description files, the method further comprising manipulating a modeling application such that the scene description files comprise at least one static scene description file and at least one dynamic scene description file (pages 6-7).

17. As per claim 36, Neumann discloses the rendering resources comprise one or more of scene description files, shader files, texture files, or procedural files (pages 4 and 6).

18. As per claim 37, the claim is rejected for the same reasons as claim 26, above. In addition, Neumann discloses a server device connected to a first communication network for communication with a user site (fig 4, page 8).

19. As per claim 38, the claim is rejected for the same reasons as claim 37 and 36, above.

20. As per claim 39, the claim is rejected for the same reasons as claims 37, 26 and 30, above.

21. As per claim 40, the claim is rejected for the same reasons as claims 37, and 27- 30, above.

22. As per claim 41, the claim is rejected for the same reasons as claims 37, and 27- 30, above.

23. As per claims 42-46, claims are rejected for the same reasons as claims 37-41, above.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luc Neumann (An Approach for an adaptive Visualization in a Mobile Environment, by Luc Neumann and Alberto Barbosa Raposo, Published by Springer-Verlag, London UK, 1997) (hereinafter Neumann) in view of Using

Oracle Jdevloper and Business Components for Java with Oracle interMedia,
February 2001, Oracle (hereinafter Oracle).

26. As per claim 34, Neumann discloses receiving from the user site a session control file comprising identities of the raw rendering resources file required for the rendering task (Resource and Task Manger controls the process of rendering, Pages 5-6); receiving from the user site at least one resource generation control file comprising associations among the raw rendering resource files and a plurality of generated rendering resources corresponding thereto (pages 8-9, fig 5 and 6); and for each raw rendering resource file, performing (i) mapping that raw rendering resource file onto a set V of dependent generated rendering resources using information derived from the at least one resource generation control file (Pages 7-9), (ii) mapping each member of the set V onto a set W of raw rendering resource files using information derived from the at least one resource generation control file (Pages 7-9, fig 5 and 6, steps 1-5, strategy to visualize only a subset of a VRML files); and (iii) marking that raw rendered resource file for generation if (a) it is not identified in the resource pool or (b) any of the raw rendering resource files set W required uploading for the rendering task Pages 7-9, fig 5 and 6, steps

1-5, strategy to visualize only a subset of a VRML files). Neumann fails to discloses forward-mapping and reverse mapping. However, Oracle discloses forward-mapping and reverse-mapping of objects (fig 1, page 5). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Neumann and Oracle. The motivation would have been to provide web-based system for rendering using oracle provided software development tools and database.

Response to Arguments

27. Applicant's arguments filed 05/31/2006 have been fully considered but they are not persuasive, therefore rejections to claims 14-17 and 26-46 is maintained.

28. Examiner called Mr. George B.F. Yee on 06/12/2006 to clarify the support for the claimed subject matter. Mr. Yee confirmed that there is no literal support in the specification for disclosure of "previous." Only the idea is discussed on page 24, last paragraph and subsequent paragraphs which is session management. However, where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary

meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. The term "maintaining previous rendering request" in the claim 1 is used by the claim to mean "session management", while the accepted meaning is "previous rendering request" The term is indefinite because the specification does not clearly redefine the term.

29. In the remarks applicants argued that:

Argument: Neumann fails to disclose maintaining at the rendering service a resource pool comprising rendering resources from at least one previous rendering request from the user site.

Response: Neumann discloses maintaining at the rendering service a resource pool comprising rendering resources (fig 6, VRML files) from at least one previous rendering request from the user site (fig 6, page 9, section 4, VRML files, first request is URL of a VRML 2.0 world send to the application server, application server sends a small scene graph document to the client; based on the small scene graph analysis the new document is sent to the application server and using the new document the final sub-VRML is sent to the client , arrows 1 and 4 two requests between client and server).

Argument: Neumann fails to disclose compare identifiers of the rendering resources in the resource pool at the rendering service with the identifiers of rendering resources currently available at the user site.

Response: Neumann discloses compare identifiers of the rendering resources in the resource pool at the rendering service with the identifiers of rendering resources currently available at the user site (fig 3, page 5, Resource and Task Manger distributes and controls the rendering process).

Argument: Neumann fails to disclose storing generated rendering resources corresponding to previous rendering requests in the resource pool.

Response: Neumann discloses storing generated rendering resources corresponding to previous rendering requests in the resource pool (fig 6, page 9, section 4, VRML files, first request is URL of a VRML 2.0 world send to the application server, application server sends a small scene graph document to the client; based on the small scene graph analysis the new document is sent to the application server and using the new document the final sub-VRML is sent to the client, arrows 1 - 4 two requests between client and server).

Argument: Neumann fails to disclose determining whether to generate a given raw resource into a generated rendering resource based on a result of the comparing step.

Response: Neumann discloses determining whether to generate a given raw resource (page 9, the new document) into a generated rendering resource based on a result of the comparing step (fig 6, page 9, section 4, VRML files, first request is URL of a VRML 2.0 world send to the application server, application server sends a small scene graph document to the client; based on the small scene graph analysis the new document is sent to the application server and using the new document the final sub-VRML is sent to the client).

Conclusion

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A. Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAS

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